

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) ~~Continuous~~ A continuous winding machine for web materials, ~~in particular lightweight netting, such as non-woven materials, which is essentially constituted by~~ comprising:

a frame (1)[[,]]; ~~on which is mounted~~

a reel to be wound (3A, 3B), said reel (3A, 3B) mounted on the frame (1); and

a device (2), mounted on the frame (1), for winding [[a]] the reel to be wound (3A, 3B), ~~also mounted on said frame (1), this~~ the winding device (2) being essentially constituted by two independent drive rolls (4, 5) ~~and 5~~ coacting with [[a]] the reel to be wound (3A, 3B), movable between a beginning winding position and an end winding position by means of movable carriages (6), the movable carriages (6) connected to linear actuators (7) and guided on the frame (1), ~~characterized in that~~ wherein,

at least one of the drive rolls of the winding device (2) is in contact with the reel (3A, 3B) from ~~the~~ a beginning of ~~the~~ a preparation phase of a new reel (3A) to a total stoppage of ~~the~~ a completed reel (3B),

~~one~~ a first (4) of the drive rolls ~~being~~ is in contact with the new reel (3A) soon after ~~the~~ a beginning of ~~the~~ a formation of ~~this latter~~ the new reel (3A) and until the total stoppage of the completed reel (3B) and ~~being~~ is provided with a means (8) for continuous application against the reel (3A, 3B) and for continuous movement with the reel (3A, 3B), vertically and horizontally, comprising a vertically movable carriage (11) guided on a frame (12) for horizontal movement parallel to the movement of the reel (3A, 3B), and

the ~~other~~ second of the drive ~~roll~~ rolls (5) ~~being~~ is mounted on a device (9) ~~comprising a means~~ for adjusting ~~the~~ a force of application against the new reel (3A) and ~~being~~ is in contact with the reel from the beginning of the formation of ~~this latter~~ the new reel (3A) to ~~the~~ a time of its disengagement of the completed reel (3B), before connecting a new reel.

2. (currently amended) ~~Machine~~ The machine according to claim 1, ~~characterized in that~~ wherein the means (8) for continuous application of the first drive roll (4) against the reel (3A, 3B) is ~~moreover~~ provided with pivotal levers (10) for supporting ~~the~~ ends of the first drive roll (4) mounted on the vertically movable carriage (11).

3. (currently amended) ~~Machine~~ The machine according to claim 2, ~~characterized in that~~ wherein,

the pivotal levers (10) have a first end for mounting the first drive roll (4) and a second end opposite the first end, and

the pivotal levers (10) are connected, at the second end opposite that for mounting the drive roll (4), to a balancing counterweight (10') and are actuated pivotally by means of [[a]] at least one jack (13).

4. (currently amended) ~~Machine~~ The machine according to claim 2, ~~characterized in that wherein~~ the vertically movable carriage (11) is guided in vertical movement on the horizontally movable carriage (12) by a guidance and movement means (11') ~~such as mechanical, hydraulic or pneumatic linear actuators.~~

5. (currently amended) ~~Machine~~ The machine according to claim 2, ~~characterized in that wherein~~ the movable frame (12) for supporting the vertically movable carriage (11) of the drive roll (4) is guided in horizontal movement on rails (12') of the frame (1) and is driven in this movement by means ~~either~~ of a motor reducer assembly engaging with a rack parallel to the guide rail (12'), ~~or by means of an electromechanical, hydraulic or pneumatic linear actuator.~~

6. (currently amended) ~~Machine~~ The machine according to claim 1, ~~characterized in that~~

wherein the second drive roll (5) has an axis substantially aligned in ~~the~~ a same plane as ~~that of the~~ a winding core (3') of the reel to be wound (3A, 3B), and is mounted on ~~[[a]]~~ the device (9) for adjusting the force of application,

and wherein the device (9) for adjusting the force of application ~~which~~ is essentially constituted by a movable carriage (14) guided on the frame (1) ~~with the possibility~~ and is capable of a reciprocal movement by means of at least one jack (15) of regulated pressure, ~~whose~~ a movement of the at least one jack (15) is being controlled by means of a control computer of the winding machine.

7. (currently amended) ~~Machine~~ The machine according to claim 3, ~~characterized in that~~ wherein the at least one jack ~~or jacks~~ (13) for pivotally actuating the first drive roll (4) and another ~~the~~ at least one jack ~~or jacks~~ (15) for moving ~~the~~ a movable carriage (14) for carrying the second drive roll (5) are connected group-wise ~~each dedicated to a drive roll and~~ to a means for regulating ~~the~~ a programmable pressure as a function of ~~the~~ i) selected winding regimes, ~~and taking account of~~ ii) the web material materials to be wound, and iii) the dimensions of the reel (3A, 3B), ~~these~~ the pressure regulating means ~~being themselves~~ controlled by means of a programmable control computer of the winding machine.

8. (currently amended) ~~Machine~~ The machine according to claim 2, ~~characterized in that wherein the~~ movements i) of the vertically movable carriage (11) of the first drive roll (4), ii) of the movable carriage (12) for horizontal movement of the vertically movable carriage (11), and iii) of the movable carriage (14) for supporting the second drive roll (5) are controlled by means of position detectors coacting directly with each of the movement means for these different carriages and ~~chasses~~ a movement means of the vertically movable carriage (11), a movement means of the horizontally movable carriage (12), a movement means of the movable carriage (14) for supporting the second drive roll (5).

9. (currently amended) ~~Machine~~ The machine according to claim 1, ~~characterized in that wherein it is provided moreover, adjacent the device (9) for regulating the force of application bearing the drive roll (5), with a connection assembly (16) and a means (17) for supplying and emplacing a new winding core~~ is provided adjacent the device (9) for adjusting the force of application.

10. (currently amended) ~~Machine~~ The machine according to claim 9, ~~characterized in that wherein the means (17) for supplying and for emplacing a new~~ empty winding core (3') is

present in the form of a pivotal cradle formed by two elbowed arms (19) each controlled in synchronism ~~each~~ by a jack (20) and extending on opposite sides of a table (21) for both i) preliminary receipt of a plurality of empty winding cores (3') and ii) holding the plurality of empty winding cores (3') in standby ~~of empty winding cores (3')~~.

11. (currently amended) ~~Machine~~ The machine according to claim 10, ~~characterized in that wherein~~ each elbowed arm (19) i) is pivotally mounted about an axle (22) on the frame (1) of the winding machine, and ii) is provided ~~on the one hand~~ with a first wing (23) at a first end for connection to the corresponding jack (20) and ~~on the other hand~~ with a second wing, (24) at a second end, having a support surface (24') for ~~an~~ the empty winding core (3'), and extending, in ~~the~~ a standby position before emplacement of ~~[[a]]~~ the empty winding new core (3'), parallel to and above the table (21) for preliminarily receiving and holding in standby the plurality of empty winding cores (3').

12. (currently amended) ~~Machine~~ The machine according to claim 11, ~~characterized in that wherein~~ the support surface (24') of the second wing (24) is delimited by, at ~~its~~ an end of the second wing (24) turned toward the movable carriages (6) for supporting ~~reels~~ the reel to be wound (3A, 3B), ~~by~~ a bearing (241') for receiving ~~the~~ an axle of the empty winding core (3'),

and further by, on ~~the~~ a side of the second wing (24) opposite ~~this the~~ bearing (241'), ~~by~~ an abutment (242'), the abutment (242') prolonged, externally of the surface (24'), by an inclined plane forming a stop for the axle of ~~[[a]]~~ the empty winding new core (3') located on the ~~preliminary holding~~ table (21).

13. (currently amended) ~~Machine~~ The machine according to claim 10, ~~characterized in that~~ wherein the ~~preliminary holding~~ table (21) has a reception surface for the ~~axles~~ axle of the new ~~cores~~ core (3'), ~~slightly~~ the reception surface inclined relative to the horizontal~~[[,]]~~ in ~~the~~ a direction of the movable carriages (6) ~~for supporting the reels to be wound (3A, 3B)~~ and delimited in ~~this the~~ the direction of the movable carriages (6) by a stop abutment (21'), and further delimited by, at ~~its~~ a rear end of the reception surface relative to ~~this the~~ the direction of the movable carriages (6), an abutment (21'') inclined relative to the vertical and forming a stop for the arrival of the new empty ~~cores~~ empty winding core (3').

14. (currently amended) A winding ~~Winding~~ process with ~~regulation of the force of application of the~~ for winding rolls (4, 5) ~~and 5~~ on a reel (3A, 3B) on a winding machine~~[[,]]~~ according to claim 1, ~~characterized in that it consists essentially, during different phases of forming the reel, in comprising the further step of:~~

applying successive and/or simultaneously said drive rolls (4, 5) ~~and 5~~ with a regulated force of application against the reel (3A, 3B), with relative movement of said drive rolls (4, 5) ~~and 5~~ relative to the reel ~~by means of support means using guiding and moving devices, as well as devices for application of said drive rolls (4 and 5) against the reel (3A, 3B).~~

15. (new) The machine according to claim 4, wherein the guidance and movement means (11') is one of mechanical, hydraulic or pneumatic linear actuators.

16. (new) The machine according to claim 2, wherein the movable frame (12) for supporting the vertically movable carriage (11) of the drive roll (4) is guided in horizontal movement on rails (12') of the frame (1) and is driven in this movement by means of a linear actuator.

17. (new) The machine according to claim 1, wherein the web materials are lightweight netting.

18. (new) The machine according to claim 17, wherein the lightweight netting are non-woven materials.